

Positive Post

Positive Bus Bar

Negative Bus Bar

To Negative Post

Negative Gnd

Outside Negative Gnd

Separator

Negative Electrode

Negative Paste

Positive Electrode

Positive Paste

H_2SO_4 Electrolyte

10

12

14

16

18

20

Figure 1

Figure 10 is a line graph showing the relationship between the number of cycles (C) and the critical crack length (D_{crit} , mm) for three different failure mechanisms, plotted for a diameter $d = 50 \mu m$.

The Y-axis represents Cycles (C), ranging from 0 to 1000. The X-axis represents D_{crit} , mm, ranging from 0.1 to 1.0.

The legend indicates three data series:

- Conventional, $f_{sp}=15\%$ (Solid line)
- $f_{sp}=50\%$ (Cracking) (Solid line)
- $f_{sp}=50\%$ (Corrosion) (Dashed line)

The graph shows that the number of cycles increases with the critical crack length. The $f_{sp}=50\%$ (Cracking) curve shows the highest number of cycles, followed by the $f_{sp}=50\%$ (Corrosion) curve, and the Conventional curve shows the lowest number of cycles.

Figure 2

09091703.15001
"090917" 20210650

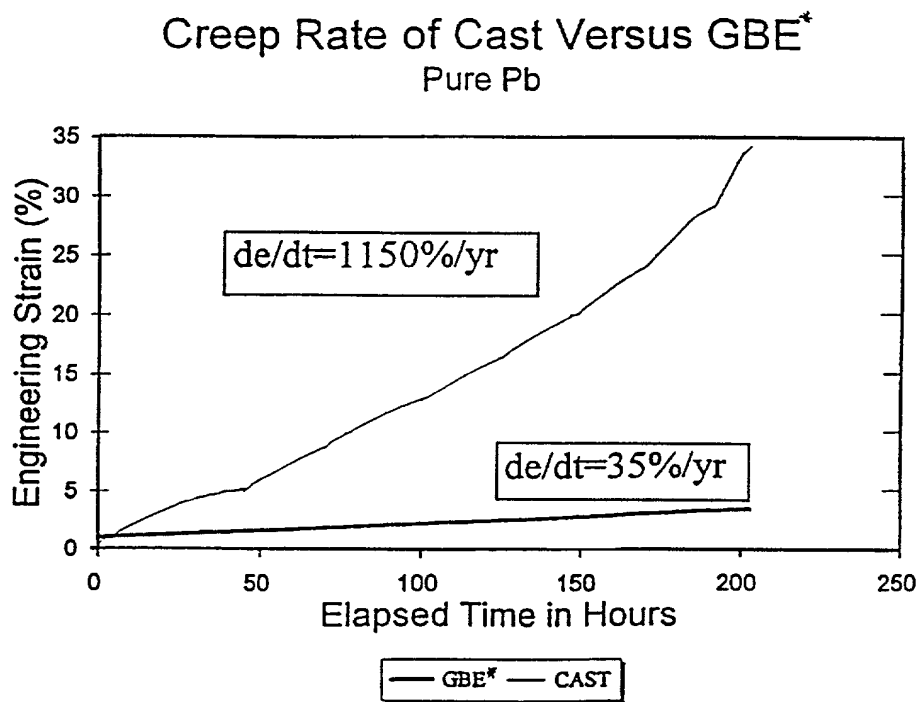


Figure 3

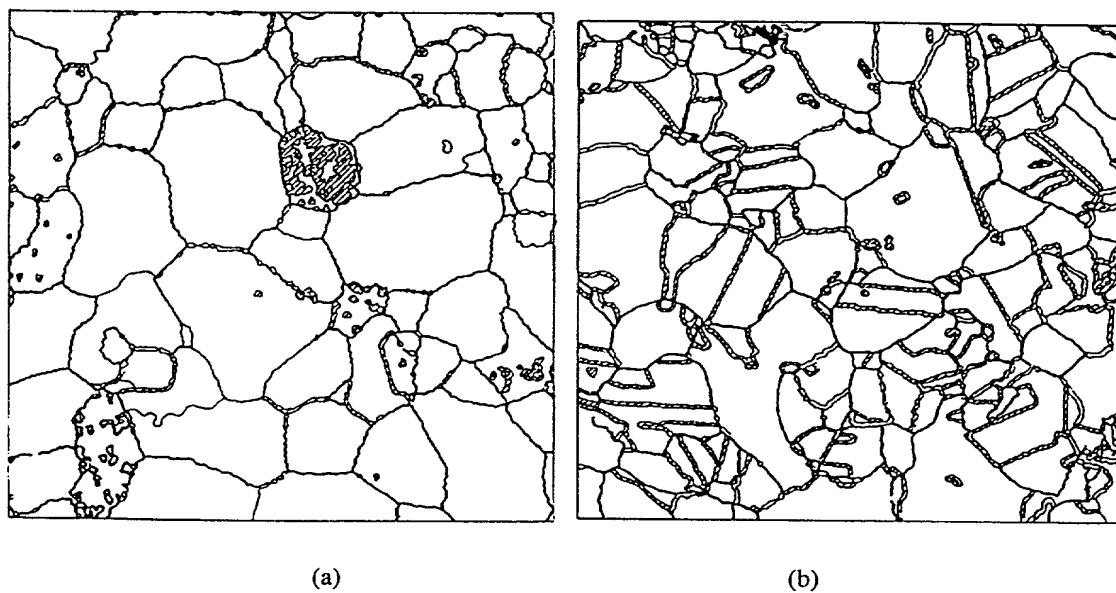


Figure 4

Frequency of Special Grain Boundaries (%)



0994702-12604
TOTAL 20716550

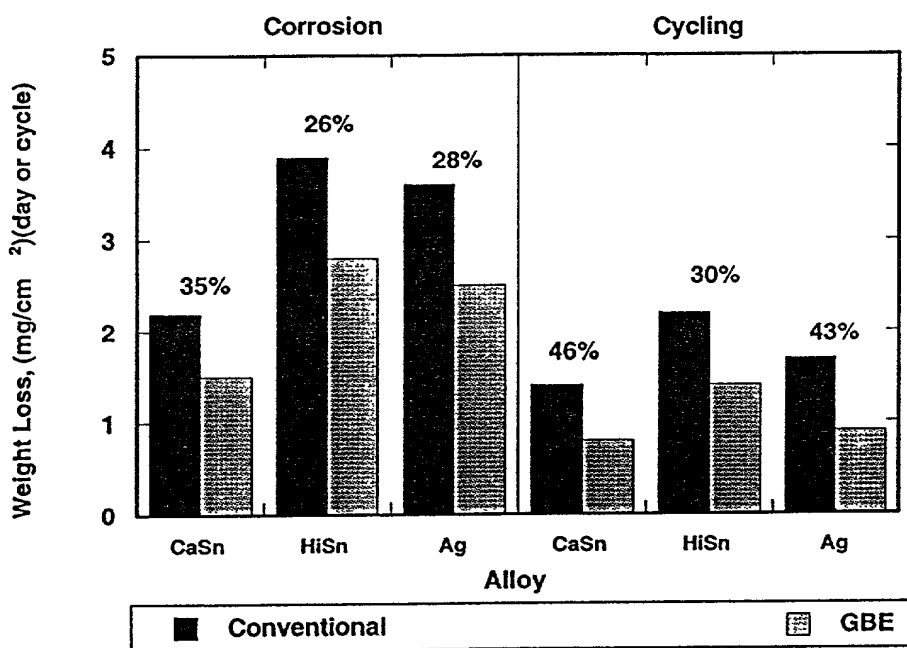


Figure 6A

0901709 112004
R09211 20/10/99

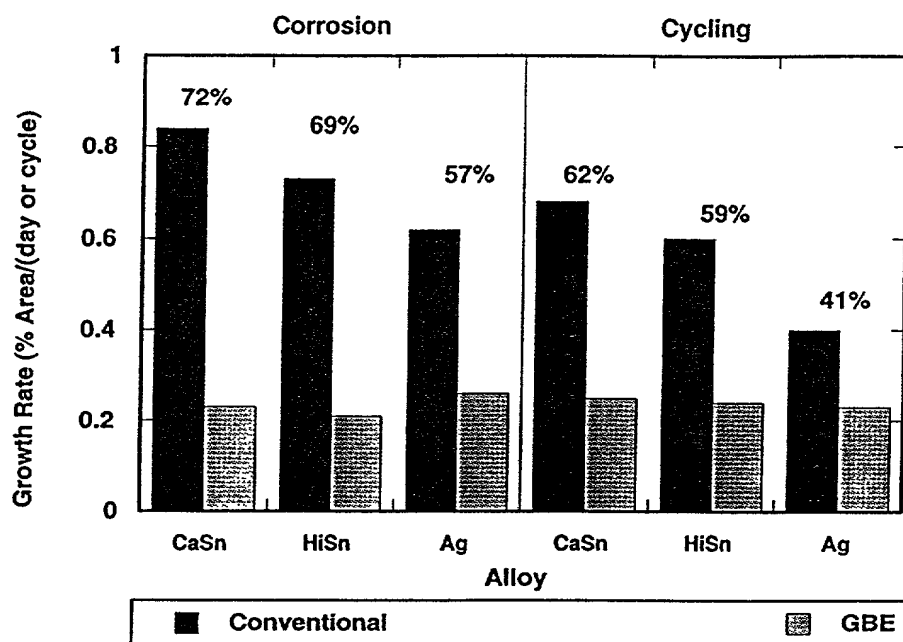


Figure 6B

0991702-112601
TODAY 20/16660

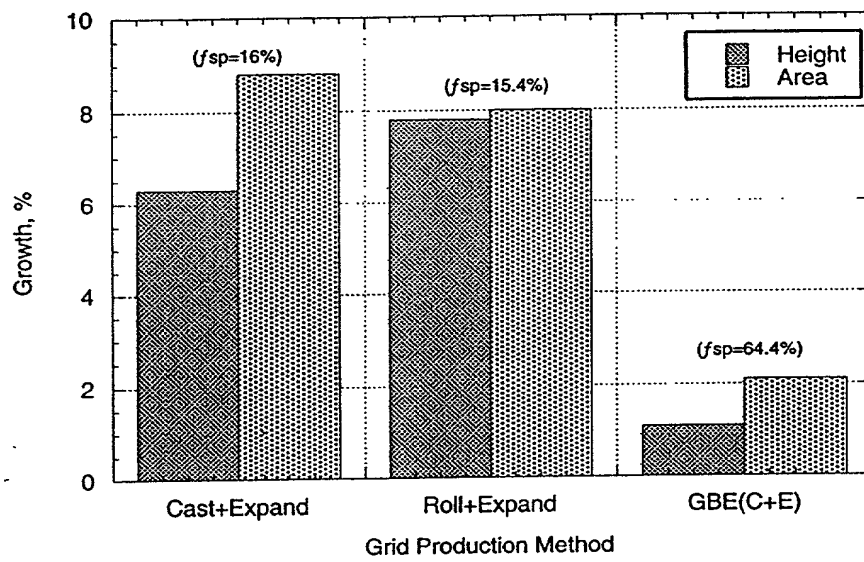


Figure 7A

09991702.12501
T0921T" 207T6660

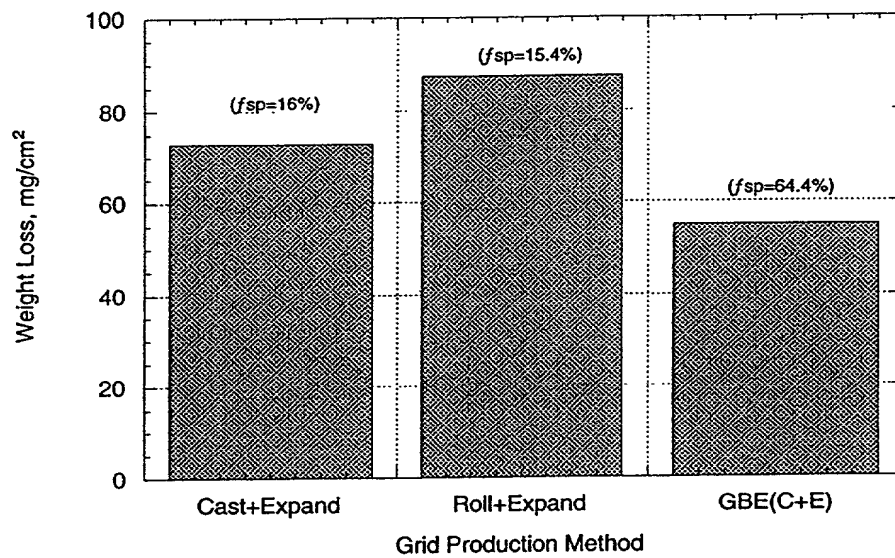


Figure 7B